

Federal Communications Commission

§ 74.902

at the place where the transmitting apparatus is located with the transmitter in the person's plain view.

Equivalent Isotropically Radiated Power (EIRP). The product of the power supplied to the antenna and the antenna gain in a given direction relative to an isotropic antenna radiator. This product may be expressed in watts or dB above 1 watt (dBW).

Instructional television fixed station. A fixed station operated by an educational organization and used primarily for the transmission of visual and aural instructional, cultural, and other types of educational material to one or more fixed receiving locations.

ITFS response station. A fixed station operated at an authorized location to provide communication by voice and/or data signals to an associated instructional television fixed station.

Main channel: The main channel is that portion of each authorized channel used for the transmission of visual and aural information as set forth in §73.682 of this Chapter and §74.938 of this subpart.

Point-to-point ITFS station. An ITFS station that transmits a highly directional signal from a fixed transmitter location to a fixed receive location.

Remote control. Operation of a station by a designated person at a control position from which the transmitter is not visible but where suitable control and telemetering circuits are provided which allow the performance of the essential functions that could be performed at the transmitter.

Studio to transmitter link (STL). A directional path used to transmit a signal from a station's studio to its transmitter.

Subsidiary channel: A subsidiary channel is any portion of an authorized channel not used for main channel transmissions.

Temporary fixed ITFS station. An ITFS station used for the transmission of material from temporary unspecified points to an ITFS station.

Unattended operation. Operation of a station by automatic means whereby the transmitter is turned on and off

and performs its functions without attention by a designated person.

[28 FR 13731, Dec. 14, 1963, as amended at 35 FR 4705, Mar. 18, 1970; 48 FR 33901, July 26, 1983; 49 FR 32596, Aug. 15, 1984; 55 FR 46013, Oct. 31, 1990; 60 FR 55483, Nov. 1, 1995]

§ 74.902 Frequency assignments.

(a) The following frequencies may be assigned to instructional television fixed stations:

Channel No.	Band limits MHz
GROUP A	
A-1	2500-2506
A-2	2512-2518
A-3	2524-2530
A-4	2536-2542
GROUP B	
B-1	2506-2512
B-2	2518-2524
B-3	2530-2536
B-4	2542-2548
GROUP C	
C-1	2548-2554
C-2	2560-2566
C-3	2572-2578
C-4	2584-2590
GROUP D	
D-1	2554-2560
D-2	2566-2572
D-3	2578-2584
D-4	2590-2596
GROUP E	
E-1	2596-2602
E-2	2608-2614
E-3	2620-2626
E-4	2632-2638
GROUP F	
F-1	2602-2608
F-2	2614-2620
F-3	2626-2632
F-4	2638-2644
GROUP G	
G-1	2644-2650
G-2	2656-2662
G-3	2668-2674
G-4	2680-2686

(b) Instructional Television Fixed Stations authorized to operate on Channels 2650-2656, 2662-2668, and 2674-

2680 MHz as of July 16, 1971, may continue to operate on a coequal basis with other stations operating in accordance with the Table of Frequency Allocations. Requests for subsequent renewals or modification of existing licenses will be considered; however, expansion of systems comprised of such stations will not be permitted except on frequencies allocated for the service.

(c) Channels 2596–2602, 2602–2608, 2608–2614, 2614–2620, 2620–2626, 2626–2632, 2632–2638, and 2638–2644 MHz and the corresponding response channels listed in § 74.939(d) are shared with the Multipoint Distribution Service. No new Instructional Television Fixed Service applications for these channels filed after May 25, 1983 will be accepted. In those areas where Multipoint Distribution Service use of these channels is allowed pursuant to § 21.902, Instructional Television Fixed Service users of these channels will continue to be afforded protection from harmful co-channel and adjacent channel interference from Multipoint Distribution Service stations.

(d)(1) A licensee is limited to the assignment of no more than four channels for use in a single area of operation, all of which should be selected from the same Group listed in paragraph (a) of this section. An area of operation is defined as the area 20 miles or less from the ITFS transmitter. Applicants shall not apply for more channels than they intend to construct within a reasonable time, simply for the purpose of reserving additional channels. The number of channels authorized to an applicant will be based on the demonstration of need for the number of channels requested. The Commission will take into consideration such factors as the amount of use of any currently assigned channels and the amount of proposed use of each channel requested, the amount of, and justification for, any repetition in the schedules, and the overall demand and availability of ITFS channels in the community. For those applicant organizations formed for the purpose of serving accredited institutional or governmental organizations, evaluation of the need will only consider service to those specified receive sites which sub-

mitted supporting documentation pursuant to § 74.932(a)(4).

(2) An applicant leasing excess capacity and proposing a schedule which complies in all respects with the requirements of Section 74.931(e) will have presumptively demonstrated need, in accordance with paragraph (d)(1) of this section, for no more than four channels, all part of the same Group listed in paragraph (a) of this section. This presumption is rebuttable by demonstrating that the application does not propose to comport with our educational programming requirements, that is, to transmit some formal educational programming, as defined in Section 74.931(a), and to transmit the requisite minimum programming of Section 74.931(e) for genuinely educational purposes and to receive sites when students are there.

(e) The same channel may be assigned to more than one station or more than one licensee in the same area if the geometric arrangement of the transmitting and receiving points or the times of operation are such that interference is not likely to occur.

(f) A temporary fixed ITFS station may use any available ITFS channel on a secondary basis. Operation of stations located within 56.3 km (35 miles) of Canada shall be limited by § 74.24(h)(3).

(g) Where adjacent channel operation is proposed in any area, the preferred location of the proposed station's transmitting antenna is at the site of the adjacent channel transmitting antenna. If this is not practicable, the adjacent channel transmitting antennas should be located as close as reasonably possible.

(h) On the E and F-channel frequencies, a point-to-point ITFS station may be involuntarily displaced by an MDS applicant, conditional licensee or licensee, provided that suitable alternative spectrum is available and that the MDS entity bears the expenses of the migration. Suitability of spectrum will be determined on a case-by-base basis; at a minimum, the alternative spectrum must be licensable by ITFS operators on a primary basis (although it need not be specifically allocated to the ITFS service), and must provide a signal that is equivalent to the prior

signal in picture quality and reliability, unless the ITFS licensee will accept an inferior signal. Potential expansion of the ITFS licensee may be considered in determining whether alternative available spectrum is suitable.

(i) If suitable alternative spectrum is located pursuant to paragraph (h) of this section, the initiating party must prepare and file the appropriate application for the new spectrum, and must simultaneously serve a copy of the application on the ITFS licensee to be moved. The initiating party will be responsible for all costs connected with the migration, including purchasing, testing and installing new equipment, labor costs, reconfiguration of existing equipment, administrative costs, legal and engineering expenses necessary to prepare and file the migration application, and other reasonable documented costs. The initiating party must secure a bond or establish an escrow account to cover reasonable incremental increase in ongoing expenses that may fall upon the migrated licensee. The bond or escrow account should also account for the possibility that the initiating party subsequently becomes bankrupt. If it becomes necessary for the Commission to assess the sufficiency of a bond or escrow amount, it will take into account such factors as projected incremental increase in electricity or maintenance expenses, or relocation expenses, as relevant in each case.

(j) The ITFS party to be moved will have a 60-day period in which to oppose the involuntary migration. The ITFS party should state its opposition to the migration with specificity, including engineering and other challenges, and a comparison of the present site and the proposed new site. If involuntary migration is granted, the new facilities must be operational before the initiating party will be permitted to begin its new or modified operations. The migration must not disrupt the ITFS licensee's provision of service, and the ITFS

licensee has the right to inspect the construction or installation work.

[29 FR 7023, May 28, 1964, as amended at 31 FR 10743, Aug. 12, 1966; 36 FR 11587, June 16, 1971; 48 FR 33901, July 26, 1983; 49 FR 32596, Aug. 15, 1984; 50 FR 26758, June 28, 1985; 55 FR 46013, Oct. 31, 1990; 56 FR 57819, Nov. 14, 1991; 58 FR 44951, Aug. 25, 1993; 59 FR 35636, July 13, 1994; 60 FR 20246, Apr. 25, 1995]

§ 74.903 Interference.

(a) Since interference in this service will occur only when an unfavorable desired-to-undesired signal ratio exists at the antenna input terminals of the affected receiver, the directive properties of receiving antennas can be used to minimize the hazard of such interference. Interference may also be controlled through the use of directive transmitting antennas, geometric arrangement of transmitters and receivers, and the use of the minimum power required to provide the needed service. Harmful interference will be considered present when the reference receiving antenna is oriented to receive the maximum desired signal, and a free space calculation determines that the desired-to-undesired signal ratio is less than the value specified for the respective channel under consideration.

(1) Cochannel interference is defined as the ratio of the desired signal to the undesired signal, at the antenna input terminals of the affected receiver, when the ratio is less than 45 dB.

(2) Adjacent channel interference is defined as the ratio of the desired signal to undesired signal present in an adjacent channel, at the output of a reference receiving antenna oriented to receive the maximum desired signal level. Harmful interference will be considered present when a free space calculation determines that this ratio is less than 0 dB. In the alternative, harmful interference will be considered present for an Instructional Television Fixed Service (ITFS) station constructed before May 26, 1983, when a free space calculation determines that this ratio is less than 10 dB, unless the individual receive site under consideration has been subsequently upgraded with up-to-date reception equipment,